

## CSP-2017-1\_IN - Ag Land\_Crop Perennial

### Soil Erosion

#### Sheet and Rill Erosion

##### Planning Criteria

Screening level: Permanent ground cover > 90% and slope < 10%.  
Assessment level: The water erosion rate is <= T.

##### Planning Criteria Met

Yes ☐ No ☐

##### Evaluation Tests

##### Evaluation Test Met

All hayed acres maintain at least 90 percent cover all year.

Yes ☐ No ☐

Irrigation water use is managed to reduce irrigation induced soil erosion.

Yes ☐ No ☐

The orchard or vineyard floor is covered by protective plants during critical erosion periods. <state provides critical erosion period(s) list; may be different within different regions of the same state>

Yes ☐ No ☐

Row orientation is across the slope or on a contour. (Applies nursery crops, orchards and vineyards)

Yes ☐ No ☐

#### Ephemeral Gully Erosion

##### Planning Criteria

##### Planning Criteria Met

Screening level: Ephemeral gullies are not occurring. Assessment level: Conservation practices and managements are in place to prevent or control ephemeral gullies.

Yes ☐ No ☐

##### Evaluation Tests

##### Evaluation Test Met

All temporary or permanent rills and gullies are stabilized. All areas expected to have high erosion rates are stable.

Yes ☐ No ☐

## CSP-2017-1 IN - Ag Land Crop Perennial

### Classic Gully Erosion

#### Planning Criteria

Screening level: Classic gullies are not present. Assessment level: Classic gully management is adequate to stop the progression of head cutting and widening and are offsite impacts are minimized by vegetation and/or structures.

#### Planning Criteria Met

Yes ☐ No ☐

#### Evaluation Tests

All temporary or permanent rills and gullies are stabilized. All areas expected to have high erosion rates are stable.

#### Evaluation Test Met

Yes ☐ No ☐

### Streambank, Shoreline, Water Conveyance Channels

#### Planning Criteria

Screening level: Streams, shoreline or channels are not adjacent to site. Assessment level: For shorelines and water conveyance channels; banks are stable or commensurate with normal geomorphological processes, AND if bank erosion is present, it is beyond the client's control or commensurate with normal geomorphological processes, AND for streambanks, SVAP2 bank condition element score > 5.

#### Planning Criteria Met

Yes ☐ No ☐

#### Evaluation Tests

Excluding all fundamentally unstable, natural geomorphic streambanks/shorelines, all streambanks/shorelines on the operation show few signs of erosion or bank failure. Each is stable and protected with natural materials.

#### Evaluation Test Met

Yes ☐ No ☐

## CSP-2017-1\_IN - Ag Land\_Crop Perennial

### Soil Quality Degradation

#### Organic Matter Depletion

##### Planning Criteria

##### Planning Criteria Met

Screening level: Permanent ground cover > 80%. Assessment level:  
The SCI is > 0.

Yes ☐ No ☐

##### Evaluation Tests

##### Evaluation Test Met

No-till or reduced tillage/planting methods are used on all crops grown  
in alley middles.

Yes ☐ No ☐

Cover crops that are not burned, grazed, or harvested are included in  
the rotation.

Yes ☐ No ☐

The orchard or vineyard floor is covered by protective plants for the  
majority of the year.

Yes ☐ No ☐

All hayed acres maintain at least 90 percent cover all year.

Yes ☐ No ☐

#### Compaction

##### Planning Criteria

##### Planning Criteria Met

Screening level: Soil compaction is not a problem AND activities do  
not cause soil compaction problems. Assessment level: Compaction is  
managed to meet client's production and management objectives.

Yes ☐ No ☐

##### Evaluation Tests

##### Evaluation Test Met

Soil moisture is tested to reduce soil compaction. Typical methods  
include moisture-by-feel or moisture meters.

Yes ☐ No ☐

## CSP-2017-1\_IN - Ag Land\_Crop Perennial

### Excess Water

#### Runoff and Flooding and Ponding

##### **Planning Criteria**

##### **Planning Criteria Met**

Screening level: Ponding or flooding not a problem AND activities do not cause ponding/flooding problems. Assessment level: Excess water is managed to meet client's objectives.

Yes ☐ No ☐

##### **Evaluation Tests**

##### **Evaluation Test Met**

Excessive water runoff, flooding, and water ponding are not concerns; or measures are applied such as grassed waterways, terraces, diversions, filter strips to reduce excessive runoff; or if flooding is a concern crops and field activities are managed within the seasonal flooding periods; or where ponding is a concern land leveling or shallow surface drains prevent ponding of water that limits crop production.

Yes ☐ No ☐

## CSP-2017-1\_IN - Ag Land\_Crop Perennial

### Insufficient Water

#### Inefficient Use of Irrigation Water

##### **Planning Criteria**

##### **Planning Criteria Met**

Screening level: PLU is not irrigated. Assessment level: The irrigation system components and management result in a Farm Irrigation Rating Index > 60 AND meets applicable State in-stream flow and lake and pond water levels requirements.

Yes ☐ No ☐

##### **Evaluation Tests**

##### **Evaluation Test Met**

An irrigation water management plan is followed that: -meets the crop's needs, while maximizing irrigation water efficiency, -schedules water application based on soil moisture monitoring and/or evapotranspiration monitoring, -measures and records the amount of water you use to irrigate as it comes onto the farm and goes to each field, AND -the system's distribution uniformity has been evaluated and necessary changes were made.

Yes ☐ No ☐

#### Inefficient Moisture Management

##### **Planning Criteria**

##### **Planning Criteria Met**

Screening level: Moisture management is not a problem AND activities do not cause inefficient moisture management problems. Assessment level: Runoff and evapotranspiration levels are minimized to meet client's management objectives.

Yes ☐ No ☐

##### **Evaluation Tests**

##### **Evaluation Test Met**

The existing plant community was selected to efficiently utilize available moisture.

Yes ☐ No ☐

## CSP-2017-1\_IN - Ag Land\_Crop Perennial

### Water Quality Degradation

#### Pesticides in Surface Water

##### **Planning Criteria**

Screening level: Pest control chemicals are not applied. Assessment level: Pesticides are stored, handled, disposed and managed to prevent runoff, spills, leaks and leaching AND conservation practices and managements are in place to minimize surface water impacts.

##### **Planning Criteria Met**

Yes ☐ No ☐

##### **Evaluation Tests**

A site-specific mixture of prevention, avoidance, monitoring, and suppression (PAMS) strategies are applied. If pesticide application is required, an environmental risk screening tool is used (such as WIN-PST or similar LGU approval tool) and application rates and timing are compliant with the label and the conservation plan.

##### **Evaluation Test Met**

Yes ☐ No ☐

#### Pesticides in Ground Water

##### **Planning Criteria**

Screening level: Pest control chemicals are not applied. Assessment level: Pesticides are stored, handled, disposed and managed to prevent runoff, spills, leaks and leaching AND conservation practices and managements are in place to minimize ground water impacts.

##### **Planning Criteria Met**

Yes ☐ No ☐

##### **Evaluation Tests**

A site-specific mixture of prevention, avoidance, monitoring, and suppression (PAMS) strategies are applied. If pesticide application is required, an environmental risk screening tool is used (such as WIN-PST or similar LGU approval tool) and application rates and timing are compliant with the label and the conservation plan.

##### **Evaluation Test Met**

Yes ☐ No ☐

## CSP-2017-1 IN - Ag Land Crop Perennial

### Nutrients in Surface Water

#### Planning Criteria

Screening level: Organic or inorganic nutrients are not applied AND the PLU is not grazed. Assessment level: Nutrient and amendment applications are based on soil or tissue tests and nutrient budgets for realistic yields AND conservation practices and managements are in place to minimize surface water impacts.

#### Planning Criteria Met

Yes ☐ No ☐

#### Evaluation Tests

Livestock access to stream is controlled OR limited to small watering or crossing areas.

#### Evaluation Test Met

Yes ☐ No ☐

If nutrients are applied, a nutrient budget is used to determine all application rates, including: - Realistic yield goals, - Nutrient uptake requirements, and - Available nutrient accounting for each of the following: (a) N, P, K from representative soil tests ( $\leq 3$  yrs), (b) Soil organic matter mineralization, (c) Legumes in rotation, (d) Previous applications of manure and other organic based materials, (e) Planned post-harvest residual soil test levels, (f) Available nutrient analysis for each nutrient source, and (g) Available nutrient uptake efficiencies from planned application rate, source, method, timing and placement. All state specific application setbacks are maintained for all nutrient applications.

Yes ☐ No ☐

## CSP-2017-1 IN - Ag Land Crop Perennial

### Nutrients in Ground Water

#### Planning Criteria

Screening level: Organic or inorganic nutrients are not applied AND PLU is not grazed. Assessment level: Nutrient and amendment applications are based on soil or tissue tests and nutrient budgets for realistic yields AND conservation practices and managements are in place to minimize ground water impacts.

#### Planning Criteria Met

Yes ☐ No ☐

#### Evaluation Tests

If nutrients are applied, a nutrient budget is used to determine all application rates, including: - Realistic yield goals, - Nutrient uptake requirements, and - Available nutrient accounting for each of the following: (a) N, P, K from representative soil tests ( $\leq 3$  yrs), (b) Soil organic matter mineralization, (c) Legumes in rotation, (d) Previous applications of manure and other organic based materials, (e) Planned post-harvest residual soil test levels, (f) Available nutrient analysis for each nutrient source, and (g) Available nutrient uptake efficiencies from planned application rate, source, method, timing and placement. All state specific application setbacks are maintained for all nutrient applications.

#### Evaluation Test Met

Yes ☐ No ☐



## **CSP-2017-1 IN - Ag Land Crop Perennial**

### **Excess Pathogens and Chemicals from Manure, Bio-solids or Compost Applications in Surface Water**

#### **Planning Criteria**

#### **Planning Criteria Met**

Screening level: Potential sources of pathogens or pharmaceuticals are not applied on the land. Assessment level: Organic materials are applied, stored, and/or handled to mitigate negative impacts to surface water sources.

Yes ☐ No ☐

#### **Evaluation Tests**

#### **Evaluation Test Met**

Livestock access to streams is limited to short periods of time and small areas.

Yes ☐ No ☐

Manure and other biosolids are applied using a nutrient budget to determine all application rates, including: - Realistic yield goals, - Nutrient uptake requirements, and - Available nutrient accounting for each of the following: (a) N, P, K from representative soil tests ( $\leq$  3yrs), (b) Soil organic matter mineralization, (c) Legumes in rotation, (d) Avoiding manure applications when soils are frozen, snow covered, or saturated, (e) Planned post-harvest residual soil test levels, (f) Available nutrient analysis for each nutrient source, and (g) Available nutrient uptake efficiencies from planned application rate, source, method, timing and placement. All state specific application setbacks are maintained for all nutrient applications. Minimum setbacks are maintained from drainageways, wells, ditched, streams, rivers, and water bodies.

Yes ☐ No ☐

## **CSP-2017-1 IN - Ag Land Crop Perennial**

### **Excess Pathogens and Chemicals from Manure, Bio-solids or Compost Applications in Ground Water**

#### **Planning Criteria**

#### **Planning Criteria Met**

Screening level: Potential sources of pathogens or pharmaceuticals are not applied on the land. Assessment level: Organic materials are applied, stored, and/or handled to mitigate negative impacts to groundwater sources.

Yes ☐ No ☐

#### **Evaluation Tests**

#### **Evaluation Test Met**

Manure and other biosolids are applied using a nutrient budget to determine all application rates, including:- Realistic yield goals,- Nutrient uptake requirements, and- Available nutrient accounting for each of the following:(a) N, P, K from representative soil tests ( $\leq$  3yrs),(b) Soil organic matter mineralization,(c) Legumes in rotation,(d) Avoiding manure applications when soils are frozen, snow covered, or saturated,(e) Planned post-harvest residual soil test levels,(f) Available nutrient analysis for each nutrient source, and(g) Available nutrient uptake efficiencies from planned application rate, source, method, timing and placement.All state specific application setbacks are maintained for all nutrient applications.Minimum setbacks are maintained from drainageways, wells, ditched, streams, rivers, and water bodies.

Yes ☐ No ☐

## CSP-2017-1 IN - Ag Land Crop Perennial

### Excessive Sediment in Surface Water

#### Planning Criteria

Screening level: Permanent ground cover > 90% and slope < 10% AND classic gullies are not present AND streams or shoreline are not on or adjacent to site. Assessment level: Upslope treatment and buffer practices address concentrated flows to water bodies AND the SVAP2 - bank condition  $\geq 5$  AND the livestock and vehicle water crossings are stable AND The water erosion rate is  $\leq T$  AND wind erosion rate is  $\leq T$ .

#### Planning Criteria Met

Yes ☐ No ☐

#### Evaluation Tests

All temporary or permanent rills and gullies are stabilized.

#### Evaluation Test Met

Yes ☐ No ☐

All hayed acres maintain at least 90 percent cover all year.

Yes ☐ No ☐

## CSP-2017-1\_IN - Ag Land\_Crop Perennial

### Air Quality Impacts

#### Emissions of Ozone Precursors

##### **Planning Criteria**

Screening level: Operations are not present that produce ozone precursor emissions. Ozone precursor producing activities are: Engines (combustion source), Pesticide application, Burning, CAFO/manure management, Fertilization (manure/commercial). Assessment level: Ozone precursor emissions are managed to meet client objectives.

##### **Planning Criteria Met**

Yes ☐ No ☐

##### **Evaluation Tests**

Ozone precursor producing activities are minimized by using one or more of the following activities: Reducing combustible engines exhaust via TIER 4 engine, applying IPM principles for pesticide applications, injection or incorporation of manure, nitrogen fertilizer incorporation or use of a nitrogen stabilizer.

##### **Evaluation Test Met**

Yes ☐ No ☐

#### Emission of Greenhouse Gases (GHGs)

##### **Planning Criteria**

Screening level: Activities are not present that produce GHGs emissions. GHG producing activities are: Fertilization(manure/commercial), CAFO/manure management, Engines (combustion source), Tillage, AND GHGs are not regulated in this planning area. Assessment level: Greenhouse gas emissions are managed to meet client objectives.

##### **Planning Criteria Met**

Yes ☐ No ☐

##### **Evaluation Tests**

If Nitrogen is applied, Nitrogen is applied as close as possible to crop uptake needs at the recommended rates.

##### **Evaluation Test Met**

Yes ☐ No ☐

## CSP-2017-1\_IN - Ag Land\_Crop Perennial

### Degraded Plant Condition

#### Undesirable Plant Productivity and Health

##### Planning Criteria

Screening level: Plant production and health is not a client concern.  
Assessment level: Plants are adapted to the site, meet production goals and do not negatively impact other resources AND plant damage from wind erosion is below Crop Damage Tolerance levels.

##### Planning Criteria Met

Yes ☐ No ☐

##### Evaluation Tests

Plants and crops are adapted to the soil and site conditions and produce average yield levels for the county in typical years.

##### Evaluation Test Met

Yes ☐ No ☐

#### Excessive Plant Pest Pressure

##### Planning Criteria

Screening level: Plant productivity is not limited from pest pressure.  
Assessment level: Pest damage to plants are below economic or environmental thresholds or client-identified criteria AND plant pests, including noxious and invasive species are managed to meet client objectives.

##### Planning Criteria Met

Yes ☐ No ☐

##### Evaluation Tests

Weeds, insects, and diseases do not limit crop production.

##### Evaluation Test Met

Yes ☐ No ☐

**CSP-2017-1\_IN - Ag Land\_Crop Perennial**

**Fish and Wildlife - Inadequate Habitat**

**Inadequate Habitat - Food**

**Planning Criteria**

Assessment level: The WHSI rating is  $\geq 0.5$  AND (when surface stream present) the SVAP2 - fish habitat complexity element score is  $\geq 7$  AND the SVAP2 - aquatic invertebrate habitat element score is  $\geq 7$ , OR conservation practices and managements are in place that meet or exceed species or guild-specific habitat model thresholds, OR food is available in quality and extent to support habitat requirements for the species of interest.

**Planning Criteria Met**

Yes ☐ No ☐

**Evaluation Tests**

Plant growth and cover is managed to develop and maintain habitat to help chosen wildlife species. <see State Wildlife Action Plan>

**Evaluation Test Met**

Yes ☐ No ☐

## CSP-2017-1 IN - Ag Land Crop Perennial

### Inadequate Habitat - Cover/Shelter

#### Planning Criteria

Assessment level: The WHSI rating is  $\geq 0.5$  AND (when surface stream present) the SVAP2 - barriers to movement element score is  $\geq 7$  AND the SVAP2 - fish habitat complexity element score is  $\geq 7$  AND the SVAP2 - aquatic invertebrate habitat element score is  $\geq 7$ , OR conservation practices and managements are in place that meet or exceed species or guild-specific habitat model thresholds, OR cover is of available quality and extent to support habitat requirements for the species of interest.

#### Planning Criteria Met

Yes ☐ No ☐

#### Evaluation Tests

Livestock access to stream is controlled OR limited to small watering or crossing areas

Yes ☐ No ☐

Forage harvests cover patterns and minimum plant heights are planned for a desired wildlife species. <See species list State Wildlife Action Plan>

Yes ☐ No ☐

Plant growth and cover is managed to develop and maintain habitat to help chosen wildlife species. <see State Wildlife Action Plan>

Yes ☐ No ☐

## **CSP-2017-1 IN - Ag Land Crop Perennial**

### **Inadequate Habitat - Habitat Continuity (Space)**

#### **Planning Criteria**

Assessment level: The WHSI rating is  $\geq 0.5$  AND (when surface stream present) the SVAP2 - barriers to movement element score is  $\geq 7$  AND the SVAP2 - aquatic invertebrate habitat element score is  $\geq 7$ , OR conservation practices and managements are in place that meet or exceed species or guild-specific habitat model thresholds, OR The connectivity of habitat components are adequate to support stable populations of targeted species.

#### **Planning Criteria Met**

Yes ☐ No ☐

#### **Evaluation Tests**

Connectivity between food resources and cover and shelter is provided for the chosen wildlife species. <see State Wildlife Action Plan>

#### **Evaluation Test Met**

Yes ☐ No ☐

The land adjacent to a stream, river, or other waterbody on the side or sides you control does: - have diverse, natural plant cover typical to that along streams in your area, AND - extend from the stream bank/shoreline for a distance of 35 feet or (if applicable) the minimum State buffer-width requirement, whichever is greater.

Yes ☐ No ☐



## CSP-2017-1\_IN - Ag Land\_Crop Perennial

### Inefficient Energy Use

#### Equipment and Facilities

##### **Planning Criteria**

##### **Planning Criteria Met**

Screening level: Client is not interested in improving equipment and facilities energy efficiency. Assessment level: Major components of a USDA approved energy audit have been implemented that address equipment and facilities to meet client objectives OR On-farm renewable energy and/or energy conserving practices have been implemented to meet client objectives.

Yes ☐ No ☐

##### **Evaluation Tests**

##### **Evaluation Test Met**

Recommendations/components of an energy audit have been applied. The audit addressed equipment and facilities on the farm. For example, energy loss from lighting, drying, refrigeration, heating, or building insulation have been improved.

Yes ☐ No ☐

### Farming/Ranching Practices and Field Operations

##### **Planning Criteria**

##### **Planning Criteria Met**

Screening level: Client is not interested in improving equipment and facilities energy efficiency. Assessment level: Major components of a USDA approved energy audit have been implemented that address equipment and facilities to meet client objectives OR On-farm renewable energy and/or energy conserving practices have been implemented to meet client objectives.

Yes ☐ No ☐

##### **Evaluation Tests**

##### **Evaluation Test Met**

Recommendations/components of an energy audit have been applied. The audit addressed field operations on the farm. For example, energy loss from driven equipment, irrigation, or pumping have been improved.

Yes ☐ No ☐